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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,746	03/15/2004	Klaus Kaiser	Bayer 10271-WCG	3450
27386 7590 11/28/2007 NORRIS, MCLAUGHLIN & MARCUS, P.A. 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			EXAMINER NGUYEN, KIET TUAN	
			ART UNIT 2881	PAPER NUMBER
			MAIL DATE 11/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/801,746

**Applicant(s)**

KAISER ET AL.

**Examiner**

Kiet T. Nguyen

**Art Unit**

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/15/04;8/3/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Objected Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the support pipe (62) as recited in claim 21** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Rejection Under 35 U.S.C. 112, Second Paragraph***

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite for reciting the limitation " $W/m^2$ ". Since, the claim 1 does not define what is the W? What is the m?

Claim 3 is indefinite for reciting the limitation "and within and" in line 5. What is the element that is and within and?

Claim 5 is indefinite for reciting the limitation " $k > 1000 W/m^2 \cdot K$ ". Since, claim 5 does not define what is the k?, what is the W?, what is the m?, what is the \*, and what is the K?

Claim 6 recites the limitation "said successive steps" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 is indefinite for reciting the limitation "GMP". Since, the claim 6 does not define what is the GMP?

Claim 7 is indefinite for reciting the limitation "Apparatus". Since, the claim 6 recites the process. Further, claim 7 does not recite any limitation that is used the apparatus of claim 7 to operate the process of the claim 6.

Claim 12 recites the limitation "said reinforcement" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the product" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the product chamber" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the support body (34)" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the support pipe (34)" in lines 2 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "said heat transfer reactor" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 26 is indefinite for reciting the limitations "PT100 resistance sensors (60, 61) and "both". What are the PT100 resistance sensors? What are the both?

Claim 26 recites the limitation "the product temperature" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the product stream" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 is indefinite for reciting the limitation "both". What are the both?

Claim 29 recites the limitation "said reinforcement" in line 3. There is insufficient antecedent basis for this limitation in the claim.

***Rejection Under 35 U.S.C. 102(b)***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on-sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Helbronner et al. (1,141,056) or WO 01/91811.

Claims 1-2 and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by De stoutz (3,934,042).

Claims 1-2 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucher (3,926,556).

Boucher (3,926,556) discloses, in figs. 1-15, an apparatus and method for continuous destruction of microorganism in fluids as milk, beer, fruit juices, soft drink beverage (see col. 10, lines 15-20), and plasma blood (see col. 5, line 2). The apparatus includes a beam of microwave energy 18 for heating and maintaining the fluid below 100 °C (see the abstract and col. 5, lines 28-30); means for holding the fluid at the temperature for up to 50 seconds (see col. 7, line 51 to col. 8, line 7); an UV light 8 for irradiating the fluid at an irradiation density of 5 to 300 W/m<sup>2</sup> (see col. 5, lines 4-40 and col. 6, lines 19-22); and a cooling unit 85 or 112.

Claims 3-27 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Mowat et al (6,464,936) discloses an apparatus using heat and UV light for sterilizing fluids.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet T. Nguyen whose telephone number is 571-272-2479. The examiner can normally be reached on Monday-Friday 8-6.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KN

  
KIET T. NGUYEN  
PRIMARY EXAMINER